F27

GB371199

Publication Title:

Improvements in devices for displaying advertisements or the like

Abstract:

Abstract of GB371199

371,199. Changing signs. FOSTER, J., Willow Beck, Mitton Road Whalley, Lancashire. May 29, 1931, Nos. 15717/31 and 256/32. [Class 3 (i).] A falling flap type of advertising &c. apparatus is combined with a viewing mirror which may move into position after each change. The drawing shows a number of display panels A independently pivoted about an axis J. The panels are advanced by a lever G pivoted at H and oscillated by a rotary cam E, the lever bearing against a pin I on each panel A. The top panel snaps past a detent V and in falling to the horizontal display position is caught and cushioned by the lever G. The mirror B is pivoted at C and is oscillated by a cam D to bring it to a vertical position out of the path of the descending panel A, the mirror first forcing the panel upward out of its way if necessary. A fixed mirror P lying clear of the rotating panels A may be combined with, or substituted for, the mirror B.

PATENT SPECIFICATION

371,199

Application Date: May 29, 1931. No. 15,717/31.

" " Jan. 5, 1932. No. 256/32.

One Complete Left: Feb. 29, 1932.

Complete Accepted: April 21, 1932.

PROVISIONAL SPECIFICATION.

No. 15,717, A.D. 1931.

Improvements in Devices for Displaying Advertisements or the like.

I, JOSEPH FOSTER, "Willow Beck", Mitton Road, Whalley, Lancashire, British, do hereby declare the nature of this invention to be as follows:—

This, my present invention, is of a type wherein the advertisements or the like, or whatever may be suitably displayed, are on screens adapted to operate in combination with a mirror or other suitable reflector, the matter upon the said screens being visually transmitted in, or otherwise made more luminous by the presence of the reflector.

This invention is characterised by the reflector being mechanically adapted to rotate both in & out of the track of one & another of a multiplicity of screens as they are rotated about a common axis.

It is further characterised by the large number of screens which may be effectively displayed, all of which may have thereon different matter, without anything being in the path of light excepting that which it is desired to display.

As a new & effective daylight sign it possesses all the virtues of such signs whether it is desired or not to use arificial light & or to change the colour effects.

The screens may be made of any suitable material & or either be a fixture or detachable. The fundamental principles of this said invention, as illustrated in the accompanying drawing & briefly described, consist of any convenient number of screens (A) each arranged radially about a common axis, (B) the screens adapted to rotate about the said axis, stage by stage.

When on reaching a certain point (C) each screen, in turn, falls into a position directly above & is for a time supported by the mirror (D) or its mountings, the mirror being arranged & adapted to come at rest when at an angle of 45°.

After a space of time the mirror is caused to rotate out of the track of the screen by means of a suitable cam (E) or other mechanical device, in such a manner as to carry the screen upwards to a point (F) where it can no longer be supported by the mirror, with the result that the screen falls onto a drum (G) less a portion of its wall, or other suitable arrangement adapted to cause the screen to again rotate, & at the same time prevent it & others from slipping back, the individual screens pushing each other & the performance described being again & again repeated.

Dated the 28th day of May, 1931.

JOSEPH FOSTER.

PROVISIONAL SPECIFICATION.

No. 256, A.D. 1932.

Improvements in Devices for Displaying Advertisements or the like.

I, JOSEPH FOSTER, "Willow Beck", Mitton Road, Whalley, Lancashire, British, do hereby declare the nature of this invention to be as follows:—

This is a cognate invention to the one the provisional patent number of which is 15,717 dated the 29th day of May 1931.

That said invention comprises a structure wherein, advertisements or the like are on pivotally mounted screens arranged to revolve about a common axis and adapted to operate in combination with a suitable reflecting medium as, for example, a mirror.

The screens being somewhat concealed but the matter thereon being vusually

transmitted in & displayed from the reflector.

The invention being characterised by the reflector being adapted to rotate in & out of the track of the successive screens as they are revolved about the said axis.

Each screen being suitably supported, controlled & adapted to pause & to visually transmit its message at a time when its track is intercepted by the reflector.

Now in carrying the said invention into practice, which is the outcome & part of the subject matter of my present & cognate invention I find that not only can the matter upon the screens be visually transmitted to & displayed from the rotatable reflector hereinbefore mentioned but that it can, in addition, be visually transmitted to & displayed from a reflector, or in fact any suitable medium, arranged in or about a convenient plane entirely out of the track of the revolving screens.

The position of such plane is directly below & parallel to that in which the rotatable reflector lies, at a time when that said reflector is at an angle of 45°.

According to this said cognate invention, I therefore propose to introduce a mirror, or other medium, capable of receiving & displaying an image visually transmitted from the revolving screens herein before described, outside the track of the revolving screens, either alone or in combination with the rotatable reflector.

The effect of which, should the two be used in combination, would be that the matter upon each screen would be first transmitted to & then displayed from the one reflector & then the other, seeing that, as the rotatable mirror is raised, there is nothing, for a time, to intercept the transmitted rays, between their source of origin (the screen) & their destination (the lower reflector).

The one display being in the form, for example, of a reflection in a mirror & the other in the form of a shadowgraph or whatever is practicable.

I also find in practice that the screens may be of a well known profusely perforated type, with matter on either side, which by making provision for each screen to be seen direct the matter on the one side may be displayed direct, but the matter on the other side transmitted to & displayed from an inclined reflector, either in or out of the track of the revolving screens.

Dated the 5th day of January, 1932.

JOSEPH FOSTER.

COMPLETE SPECIFICATION.

Improvements in Devices for Displaying Advertisements or the like.

I, JOSEPH FOSTER, "Willow Beck", Mitton Road, Whalley, Lancashire, British, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This my present invention consists of a multiplicity of rotatably mounted screens, or the like, operating in combination with one or more reflecting mediums, the screens being adapted to revolve on and/or about a common axis and to convey in any suitable manner certain matter to be visually transmitted in and/or on and to be displayed from the said mediums, and in certain cases matter adapted to be otherwise displayed.

According to a first feature of the invention, one medium only is employed in combination with the screens, the invention being characterised by the said medium being mechanically adapted to rotate in and out of the track of each and all screens as they are revolved.

According to a second feature of the invention, two reflecting mediums are employed in combination with the revolving screens, the invention being further characterised by one medium being adapted to rotate in and out of the track of the screens and the other being at a suitable place and angle out of the track.

Another or third feature of the invention is characterised in that, the latter medium only may be employed in combination with the said screens, this said feature, although not so effective as the former combinations is obviously related to them, being included more on that account.

As a new and effective daylight sign, the various features of my invention possess all the virtues of such signs, whether it is desired, or not, to use artificial light and/or to have changing colour effects, and/or interchangeable matter.

The screens may be made in any suitable manner so long as they are adapted to convey matter to be displayed in a manner hereinafter stated.

The fundamental principles of my said

invention will be better understood by reference to the accompanying drawing, shewing a suitable method of carrying the same into practice.

The drawing is an elevation of one end of a structure, the end plate having been removed to show the workings.

(A). Is one of a multiplicity of suitably constructed frames, screens or the like adapted to convey certain matter, preferably designed and executed to a visually transmitted viz:—Words, interchangeable letters, information or in fact anything practicable, these said screens are individually rotatably mounted, either on or about the central axis (J).

(B) Indicates approximately the position of the rotatable reflecting medium, as for example, a mirror, or other surface material capable of displaying matter visually projected upon it.

(C). Is a pivot, or the like, on which the medium is adapted to rotate in and out of the track of each and all screens.

(D and E) are two revolving cams, freely mounted on a stud axle (F). The edges of cam (D) being in contact with the medium mountings and adapted to rotate the medium as required and in addition, being adapted to come in contact with a small projecting roller (U). mounted on what may be described as a combined push lever and screen control (G). rotatably mounted on pivot (H). The roller (U) being a suitable means employed so that cam (D) may push (G) higher, as an alternative to making cam E larger.

The said lever and screen control being employed where in certain cases, I find it advisable to support the screens in their fall, particularly when they are of a heavy type, one of its edges is arranged to rest on Cam (E) another of its edges being designed to come in contact with a suitable device, provided on the ends of each frame or screen, as for example, a projecting pin (I).

G. therefore serves a dual purpose in that, it is adapted to push the screens a part of a revolution, when rotated upwards, by coming in contact with I. and in addition, control the screens in their fall, when rotated downwards, by (I) coming in contact with it.

The top screen being pushed past a small regulator (V) and becoming overbalanced falls on (G). the bottom screen being scotched by a ratchet to prevent back slip.

It is of course obvious that (E. G. and I) need not be employed when the screens are light in weight, they, the screens, can then be adapted to fall in their respective positions, and be supported and rotated by other and more simple means for example, as seen with reference to the drawing accompanying my provisional specification.

(K). is a large crown wheel, attached to the cams, receiving its driving power by any suitable means, it is in mesh, with a small pinion (L) keyed on a power transmission shaft M, extending to the other end of the structure, which contains like features, the operating mechanism being concealed between two walls at either end of the structure, and various provisions being made for that purpose.

For example (N). is a radius hole, through which the mirror is supported, and (O) is a semi-circular opening designed to allow projecting pins (I) to come in contact with their operating mechanism and in addition to facilitate the handling of the screens, all of which may be adapted to be taken out in a body.

(P) is a modification of the invention, wherein, if desired two mediums namely (B. and P.) may be employed, in combination with the screens constructed and arranged and operated as hereinbefore described. (B) is adapted to rotate in and out of the track of the revolving screens and (P) is arranged at a suitable angle and place entirely out of the track, the effect of which will be readily understood by the following description.

One screen (A) is represented as having just dropped and is shewn resting on (G) and in the full path of light (Q) (natural or artificial) directed on (B)

Visual projections from A and/or anything in addition, designed to be in the path of light, would have been seen to creep in and/or on (B) and to be displayed from (B) in the direction of (R) as screen (A) fell slowly to its present position. When (B) is caused to rotate out of the track of (A) and incidently out of the path of light, (A) of course yielding as (B) comes in contact with it, but returning and resting for a further slight period on (G) in its present position, the light from the source (Q) being directed on (P) would then cause like visual projections to creep in and/or on and likewise be displayed from medium (P) and in the direction of (S) as (B) slowly moved out of the path of light.

(G) is then rotated downwards allowing (A) to further fall and pass between (J) and (C) into a position where itself and all other screens are pushed a part of a revolution as (G) is rotated upwards.

The medium (B) in the meantime returning to a display position and (G) incidently catching a falling screen and conveying it into the path of light.

The moving effects as they are seen to creep on and off one and another medium

being most alluring and even perplexing, since, it will be understood, the medium (B) obscures the view of the screens from the direction of (R) and a suitable removable plate obscures the view from the direction of (T).

A further and I may say fourth feature of the invention is its adaptability to display matter designed to be visually transmitted in a manner hereinbefore described and in addition, to display matter designed to be seen direct, for it is obvious that displays may be made in the direction of either (T. R or S).

Detachable shutters, or their equivalent may be employed along the front with which one could either shut off or expose any particular effect.

For example, screens of a well known profusely perforated type may be employed, bearing matter on both sides, the matter on one side being adapted to be seen from direction T. and the matter on the other being adapted to be visually projected on either mediums B or P and displayed in the direction of (R) or (S) in a manner and by means I will now describe.

On the front of each interstitial screen, there is painted, printed or otherwise impressed certain characters (i.e.) letters or the like, care being taken to conserve the value of the perforations.

The back of each screen is equipped with a transparent lining or some such equivalent on which there is also certain characters (i.e.) letters or the like, the letters being opaque and not the ground or vice-versa.

The screens thus prepared displaying the matter thereon in the following manner.

As each screen rises to a position indicated by the regulator (V) from which it falls to intercept the full path of light, the matter on the front of the screen is seen or displayed in the direction of (T) but when the screen falls to intercept the path of light, a reflection of what is on the front of the screen is not, as may be expected, reflected in the display medium below, but on the contrary, an image of that which is on the back or upper surface of the screen is seen, such image having been projected in the medium owing to the light being of greater magnitude above the screen than any below it, the said light penetrating the transparencies thereon but not the opacities and for the time being rendering all other matter on the screen invisible in the display medium.

With reference to colour effects, they may be got by any suitable and well known means, as for example (1). by coloured lights placed in convenient positions in or about the structure and/or (2). by means of the screens themselves being executed in various colours and/or (3). by means of an endless band of transparent but coloured material passing over four suitable rollers, one of each being arranged in the top and bottom angles at the ends of the structure and adapted to revolve the band which, in its course would pass along the top and in the path of light, above, and along and underneath one or another display mediums below.

It will be seen and understood that the device may be attractive in any one of the following combinations, together with necessary accessories.

Viz. (1). A and B. in combination.
(2). A and P; in combination and/or
(3). B. P. and A. in combination.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

(1). In a device for displaying advertisements or the like, embodying a structure, wherein are employed a multiplicity of suitably designed and constructed screens, or the like, (A) operating in combination with a suitable display medium (B), characterised by each screen or its carrier being pivotally and/or otherwise loosely mounted on and/or about a common axis and adapted to be revolved around the said axis and the display medium being suitably mounted, balanced and adapted to rotate in and out of the track of one and another of the screens as they are revolved, the screens together with the display medium, being suitably and mechanically operated and controlled, their movements being arrested for desired periods at suitable times and places, each screen one after another in succession invading a certain path of light at or about a time coinciding with that, when its track is intercepted by the medium, the matter on and/or about the said screen and/or other and additional effects designed to be displayed being then visually projected in and/or on and displayed from the medium, and in a certain direction, the said medium afterwards rotating out of the track and the said screen at a time arranged, passing between the axis about which it revolves and the pivots on which the medium rotates, the screens in succession each displaying other and different compositions in a manner hereinbefore described and as illustrated with reference to the accompanying drawings.

(2). In a device for displaying advertisements or the like, comprising a structure wherein are employed a multiplicity of rotatably mounted screens (A) adapted to revolve about a common axis the screens

operating in combination with a display medium (B). adapted to rotate in and out of the track of the said screens as embodied and claimed in Claim 1, and in addition, in combination with a second display medium (P). arranged at a suitable angle and place out of the track and in a plane some distance below the first medium, the said second medium being adapted to receive and to display certain matter visually projected in and/or upon it at such times as the first medium is rotated out of the track of the screens and incidently out of the path of light, the two mediums each receiving images from a like source, but displaying them through separate apertures or the like suitably provided about the front wall of the structure in a manner as hereinbefore described and illustrated with reference to the accompanying drawings.

(3). In a device for displaying advertisements or the like, embodying a structure, wherein are employed a multiplicity of mechanically operated and suitably controlled screens or the like (A) operating in combination with one display medium only, as either (P) or (B) or as an alternative two as (P) and (B) in combination, characterised by each and all screens being loosely and rotatably mounted on and/or about a common axis and adapted to revolve around said axis in a manner comprising certain movements and pauses essentially assuring that each screen may be conveyed to and rest in a plane directly intercepting a path of light, natural or artificial, from a source above directed on the said medium or mediums below and at a time approximately coinciding with that when all other screens, including its nearest preceding and succeeding neighbours are entirely out of the path of such light and in planes at angles of certain degrees to each other, all screens as they intercept such path, catching on their upper surface a maximum of light with a minimum of interference to get desired effects, the said screens being designed and adapted to let the said light pass through certain transparencies or equivalents, but not opacities thereon, to the display medium below, thus projecting images in and/or on the said medium which, owing to the provision for such light and the disposition of the screens, is intensified and increased in luminosity, the improvement consisting in the means adapted to display different compositions or the like in succession of a well known luminous type by means of projected light and shadow as hereinbefore described and illustrated with reference to the accompanying drawings.

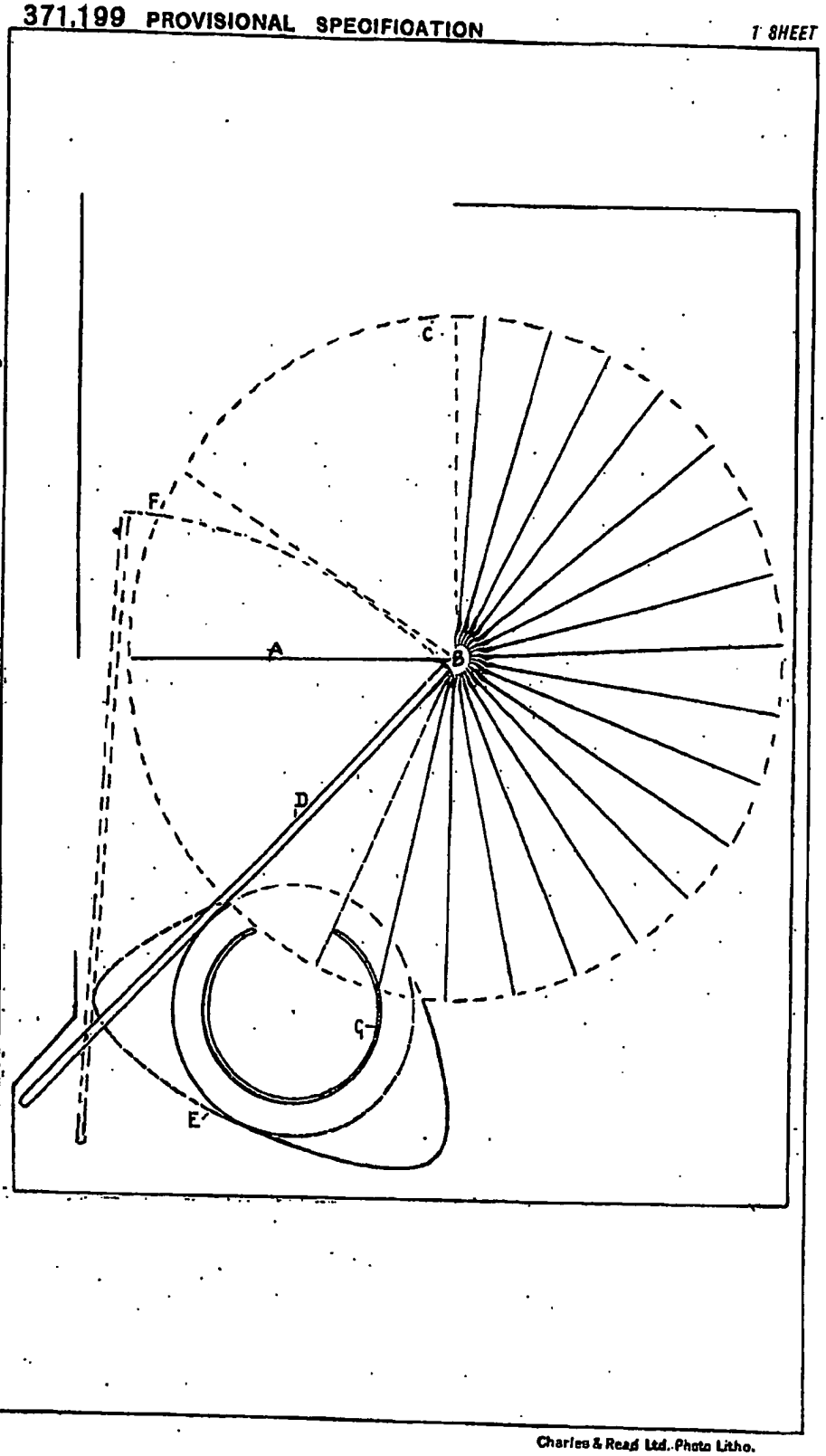
(4). In a device for displaying advertisements or the like comprising a structure wherein are employed a multiplicity of screens in combination with a certain display medium or mediums, arranged, operated and controlled as claimed in claims 1, 2 and 3 but as an alternative the screens are constructed of profusely perforated or equivalent interstitial material, the front of each screen having thereon, painted printed or otherwise impressed certain characters care being taken to conserve the perforations and the back of each screen being equipped with a transparent lining or being otherwise equivalently prepared as a ground on which also are characters, the said ground being opaque but not the characters, or vice-versa, the characters on the front being displayed direct as each screen rises to and temporarily rests in a position prior to intercepting a path of light directed from a source above on to the medium or mediums below and the characters on the back of each screen being displayed in &/or on the mediums by means of projected light and shadow as each screen invades a position directly intercepting such path of light and the medium or mediums below, the improvement consisting in the adaptation of such constructed screens to operate in a manner hereinbefore described and as illustrated to display different compositions in succession.

(5) A device as claim in claims 1. 2. 3. and 4 comprising a combination of screens and one or more display mediums arranged constructed and mechanically adapted to display advertisements or the like in a manner hereinbefore described and as illustrated with reference to the accompanying drawings.

Dated this 22nd day of February, 1932.

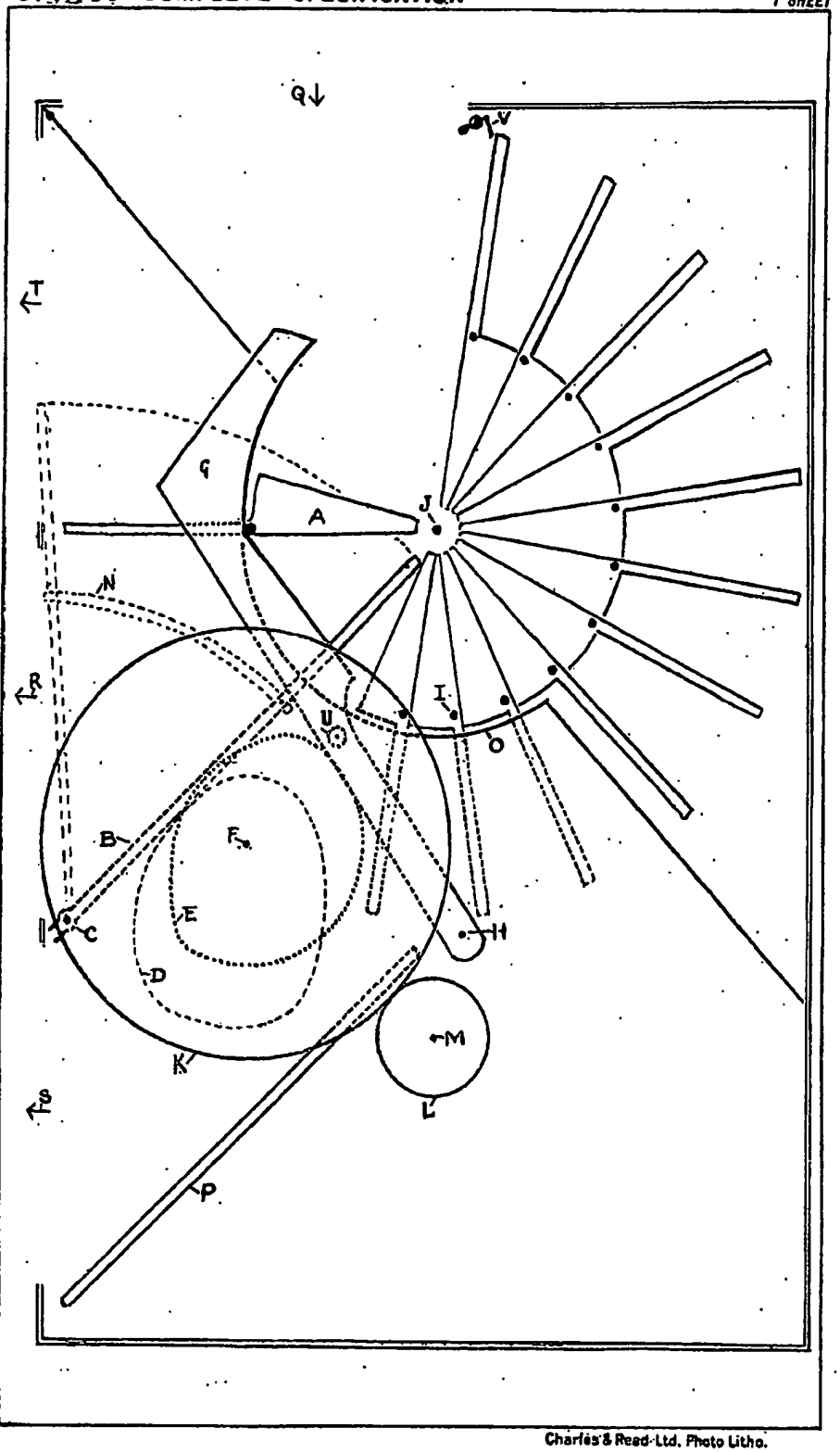
JOSEPH FOSTER.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1932.



[This Drawing is a reproduction of the Original on a reduced scale]

Charles & Read Ltd. Photo Litho.



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Abstract:

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371,199. Changing signs. FOSTER, J., Willow Beck, Mitton Road Whalley, Lancashire. May 29, 1931, Nos. 15717/31 and 256/32. [Class 3 (i).] A falling flap type of advertising &c. apparatus is combined with a viewing mirror which may move into position after each change. The drawing shows a number of display panels A independently pivoted about an axis J. The panels are advanced by a lever G pivoted at H and oscillated by a rotary cam E, the lever bearing against a pin I on each panel A. The top panel snaps past a detent V and in falling to the horizontal display position is caught and cushioned by the lever G. The mirror B is pivoted at C and is oscillated by a cam D to bring it to a vertical position out of the path of the descending panel A, the mirror first forcing the panel upward out of its way if necessary. A fixed mirror P lying clear of the rotating panels A may be combined with, or substituted for, the mirror B.

PATENT SPECIFICATION

371,199

Application Date: May 29, 1931. No. 15,717/31.

" " Jan. 6, 1932. No. 256/32.

One Complete Left: Feb. 23, 1932.

Complete Accepted: April 21, 1932.

PROVISIONAL SPECIFICATION.

No. 15,717, A.D. 1931.

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I, JOSEPH FOSTER, "Willow Beck", Mitton Road, Whalley, Lancashire, British, do hereby declare the nature of this invention to be as follows:—

This, my present invention, is of a type wherein the advertisements or the like, or whatever may be suitably displayed, are on screens adapted to operate in combination with a mirror or other suitable reflector, the matter upon the said screens being visually transmitted in, or otherwise made more luminous by the presence of the reflector.

This invention is characterised by the reflector being mechanically adapted to rotate both in & out of the track of one & another of a multiplicity of screens as they are rotated about a common axis.

It is further characterised by the large number of screens which may be effectively displayed, all of which may have thereon different matter, without anything being in the path of light excepting that which it is desired to display.

As a new & effective daylight sign it possesses all the virtues of such signs whether it is desired or not to use arificial light & or to change the colour effects.

The screens may be made of any suitable material & or either be a fixture or detachable. The fundamental principles of this said invention, as illustrated in the accompanying drawing & briefly described, consist of any convenient number of screens (A) each arranged radially about a common axis, (B) the screens adapted to rotate about the said axis, stage by stage.

When on reaching a certain point (C) each screen, in turn, falls into a position directly above & is for a time supported by the mirror (D) or its mountings, the mirror being arranged & adapted to come at rest when at an angle of 45°.

After a space of time the mirror is caused to rotate out of the track of the screen by means of a suitable cam (E) or other mechanical device, in such a manner as to carry the screen upwards to a point (F) where it can no longer be supported by the mirror, with the result that the screen falls onto a drum (G) less a portion of its wall, or other suitable arrangement adapted to cause the screen to again rotate, & at the same time prevent it & others from slipping back, the individual screens pushing each other & the performance described being again & again repeated.

Dated the 28th day of May, 1931.

JOSEPH FOSTER.

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That said invention comprises a structure wherein, advertisements or the like are on pivotally mounted screens arranged to revolve about a common axis and adapted to operate in combination with a suitable reflecting medium as, for example, a mirror.

The screens being somewhat concealed but the matter thereon being vusually

transmitted in & displayed from the reflector.

The invention being characterised by the reflector being adapted to rotate in & out of the track of the successive screens as they are revolved about the said axis.

Each screen being suitably supported, controlled & adapted to pause & to visually transmit its message at a time when its track is intercepted by the reflector.

Now in carrying the said invention into practice, which is the outcome & part of the subject matter of my present & cognate invention I find that not only can the matter upon the screens be visually transmitted to & displayed from the rotatable reflector hereinbefore mentioned but that it can, in addition, be visually transmitted to & displayed from a reflector, or in fact any suitable medium, arranged in or about a convenient plane entirely out of the track of the revolving screens.

The position of such plane is directly below & parallel to that in which the rotatable reflector lies, at a time when that said reflector is at an angle of 45°.

According to this said cognate invention, I therefore propose to introduce a mirror, or other medium, capable of receiving & displaying an image visually transmitted from the revolving screens herein before described, outside the track of the revolving screens, either alone or in combination with the rotatable reflector.

The effect of which, should the two be used in combination, would be that the matter upon each screen would be first transmitted to & then displayed from the one reflector & then the other, seeing that, as the rotatable mirror is raised, there is nothing, for a time, to intercept the transmitted rays, between their source of origin (the screen) & their destination (the lower reflector).

The one display being in the form, for example, of a reflection in a mirror & the other in the form of a shadowgraph or whatever is practicable.

I also find in practice that the screens may be of a well known profusely perforated type, with matter on either side, which by making provision for each screen to be seen direct the matter on the one side may be displayed direct, but the matter on the other side transmitted to & displayed from an inclined reflector, either in or out of the track of the revolving screens.

Dated the 5th day of January, 1932.

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According to a first feature of the invention, one medium only is employed in combination with the screens, the invention being characterised by the said medium being mechanically adapted to rotate in and out of the track of each and all screens as they are revolved.

According to a second feature of the invention, two reflecting mediums are employed in combination with the revolving screens, the invention being further characterised by one medium being adapted to rotate in and out of the track of the screens and the other being at a suitable place and angle out of the track.

Another or third feature of the invention is characterised in that, the latter medium only may be employed in combination with the said screens, this said feature, although not so effective as the former combinations is obviously related to them, being included more on that account.

As a new and effective daylight sign, the various features of my invention possess all the virtues of such signs, whether it is desired, or not, to use artificial light and/or to have changing colour effects, and/or interchangeable matter.

The screens may be made in any suitable manner so long as they are adapted to convey matter to be displayed in a manner hereinafter stated.

The fundamental principles of my said

invention will be better understood by reference to the accompanying drawing, shewing a suitable method of carrying the same into practice.

The drawing is an elevation of one end of a structure, the end plate having been removed to show the workings.

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(B) Indicates approximately the position of the rotatable reflecting medium, as for example, a mirror, or other surface material capable of displaying matter visually projected upon it.

(C). Is a pivot, or the like, on which the medium is adapted to rotate in and out of the track of each and all screens.

(D and E) are two revolving cams, freely mounted on a stud axle (F). The edges of cam (D) being in contact with the medium mountings and adapted to rotate the medium as required and in addition, being adapted to come in contact with a small projecting roller (U). mounted on what may be described as a combined push lever and screen control (G). rotatably mounted on pivot (H). The roller (U) being a suitable means employed so that cam (D) may push (G) higher, as an alternative to making cam E larger.

The said lever and screen control being employed where in certain cases, I find it advisable to support the screens in their fall, particularly when they are of a heavy type, one of its edges is arranged to rest on Cam (E) another of its edges being designed to come in contact with a suitable device, provided on the ends of each frame or screen, as for example, a projecting pin (I).

G. therefore serves a dual purpose in that, it is adapted to push the screens a part of a revolution, when rotated upwards, by coming in contact with I. and in addition, control the screens in their fall, when rotated downwards, by (I) coming in contact with it.

The top screen being pushed past a small regulator (V) and becoming overbalanced falls on (G). the bottom screen being scotched by a ratchet to prevent back slip.

It is of course obvious that (E. G. and I) need not be employed when the screens are light in weight, they, the screens, can then be adapted to fall in their respective positions, and be supported and rotated by other and more simple means for example, as seen with reference to the drawing accompanying my provisional specification.

(K). is a large crown wheel, attached to the cams, receiving its driving power by any suitable means, it is in mesh, with a small pinion (L) keyed on a power transmission shaft M, extending to the other end of the structure, which contains like features, the operating mechanism being concealed between two walls at either end of the structure, and various provisions being made for that purpose.

For example (N). is a radius hole, through which the mirror is supported, and (O) is a semi-circular opening designed to allow projecting pins (I) to come in contact with their operating mechanism and in addition to facilitate the handling of the screens, all of which may be adapted to be taken out in a body.

(P) is a modification of the invention, wherein, if desired two mediums namely (B. and P.) may be employed, in combination with the screens constructed and arranged and operated as hereinbefore described. (B) is adapted to rotate in and out of the track of the revolving screens and (P) is arranged at a suitable angle and place entirely out of the track, the effect of which will be readily understood by the following description.

One screen (A) is represented as having just dropped and is shewn resting on (G) and in the full path of light (Q) (natural or artificial) directed on (B)

Visual projections from A and/or anything in addition, designed to be in the path of light, would have been seen to creep in and/or on (B) and to be displayed from (B) in the direction of (R) as screen (A) fell slowly to its present position. When (B) is caused to rotate out of the track of (A) and incidently out of the path of light, (A) of course yielding as (B) comes in contact with it, but returning and resting for a further slight period on (G) in its present position, the light from the source (Q) being directed on (P) would then cause like visual projections to creep in and/or on and likewise be displayed from medium (P) and in the direction of (S) as (B) slowly moved out of the path of light.

(G) is then rotated downwards allowing (A) to further fall and pass between (J) and (C) into a position where itself and all other screens are pushed a part of a revolution as (G) is rotated upwards.

The medium (B) in the meantime returning to a display position and (G) incidently catching a falling screen and conveying it into the path of light.

The moving effects as they are seen to creep on and off one and another medium

being most alluring and even perplexing, since, it will be understood, the medium (B) obscures the view of the screens from the direction of (R) and a suitable removable plate obscures the view from the direction of (T).

A further and I may say fourth feature of the invention is its adaptability to display matter designed to be visually transmitted in a manner hereinbefore described and in addition, to display matter designed to be seen direct, for it is obvious that displays may be made in the direction of either (T. R or S).

Detachable shutters, or their equivalent may be employed along the front with which one could either shut off or expose any particular effect.

For example, screens of a well known profusely perforated type may be employed, bearing matter on both sides, the matter on one side being adapted to be seen from direction T. and the matter on the other being adapted to be visually projected on either mediums B or P and displayed in the direction of (R) or (S) in a manner and by means I will now describe.

On the front of each interstitial screen, there is painted, printed or otherwise impressed certain characters (i.e.) letters or the like, care being taken to conserve the value of the perforations.

The back of each screen is equipped with a transparent lining or some such equivalent on which there is also certain characters (i.e.) letters or the like, the letters being opaque and not the ground or vice-versa.

The screens thus prepared displaying the matter thereon in the following manner.

As each screen rises to a position indicated by the regulator (V) from which it falls to intercept the full path of light, the matter on the front of the screen is seen or displayed in the direction of (T) but when the screen falls to intercept the path of light, a reflection of what is on the front of the screen is not, as may be expected, reflected in the display medium below, but on the contrary, an image of that which is on the back or upper surface of the screen is seen, such image having been projected in the medium owing to the light being of greater magnitude above the screen than any below it, the said light penetrating the transparencies thereon but not the opacities and for the time being rendering all other matter on the screen invisible in the display medium.

With reference to colour effects, they may be got by any suitable and well known means, as for example (1). by coloured lights placed in convenient positions in or about the structure and/or (2). by means of the screens themselves being executed in various colours and/or (3). by means of an endless band of transparent but coloured material passing over four suitable rollers, one of each being arranged in the top and bottom angles at the ends of the structure and adapted to revolve the band which, in its course would pass along the top and in the path of light, above, and along and underneath one or another display mediums below.

It will be seen and understood that the device may be attractive in any one of the following combinations, together with necessary accessories.

Viz. (1). A and B. in combination.
(2). A and P; in combination and/or
(3). B. P. and A. in combination.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

(1). In a device for displaying advertisements or the like, embodying a structure, wherein are employed a multiplicity of suitably designed and constructed screens, or the like, (A) operating in combination with a suitable display medium (B), characterised by each screen or its carrier being pivotally and/or otherwise loosely mounted on and/or about a common axis and adapted to be revolved around the said axis and the display medium being suitably mounted, balanced and adapted to rotate in and out of the track of one and another of the screens as they are revolved, the screens together with the display medium, being suitably and mechanically operated and controlled, their movements being arrested for desired periods at suitable times and places, each screen one after another in succession invading a certain path of light at or about a time coinciding with that, when its track is intercepted by the medium, the matter on and/or about the said screen and/or other and additional effects designed to be displayed being then visually projected in and/or on and displayed from the medium, and in a certain direction, the said medium afterwards rotating out of the track and the said screen at a time arranged, passing between the axis about which it revolves and the pivots on which the medium rotates, the screens in succession each displaying other and different compositions in a manner hereinbefore described and as illustrated with reference to the accompanying drawings.

(2). In a device for displaying advertisements or the like, comprising a structure wherein are employed a multiplicity of rotatably mounted screens (A) adapted to revolve about a common axis the screens

operating in combination with a display medium (B). adapted to rotate in and out of the track of the said screens as embodied and claimed in Claim 1, and in addition, in combination with a second display medium (P). arranged at a suitable angle and place out of the track and in a plane some distance below the first medium, the said second medium being adapted to receive and to display certain matter visually projected in and/or upon it at such times as the first medium is rotated out of the track of the screens and incidently out of the path of light, the two mediums each receiving images from a like source, but displaying them through separate apertures or the like suitably provided about the front wall of the structure in a manner as hereinbefore described and illustrated with reference to the accompanying drawings.

(3). In a device for displaying advertisements or the like, embodying a structure, wherein are employed a multiplicity of mechanically operated and suitably controlled screens or the like (A) operating in combination with one display medium only, as either (P) or (B) or as an alternative two as (P) and (B) in combination, characterised by each and all screens being loosely and rotatably mounted on and/or about a common axis and adapted to revolve around said axis in a manner comprising certain movements and pauses essentially assuring that each screen may be conveyed to and rest in a plane directly intercepting a path of light, natural or artificial, from a source above directed on the said medium or mediums below and at a time approximately coinciding with that when all other screens, including its nearest preceding and succeeding neighbours are entirely out of the path of such light and in planes at angles of certain degrees to each other, all screens as they intercept such path, catching on their upper surface a maximum of light with a minimum of interference to get desired effects, the said screens being designed and adapted to let the said light pass through certain transparencies or equivalents, but not opacities thereon, to the display medium below, thus projecting images in and/or on the said medium which, owing to the provision for such light and the disposition of the screens, is intensified and increased in luminosity, the improvement consisting in the means adapted to display different compositions or the like in succession of a well known luminous type by means of projected light and shadow as hereinbefore described and illustrated with reference to the accompanying drawings.

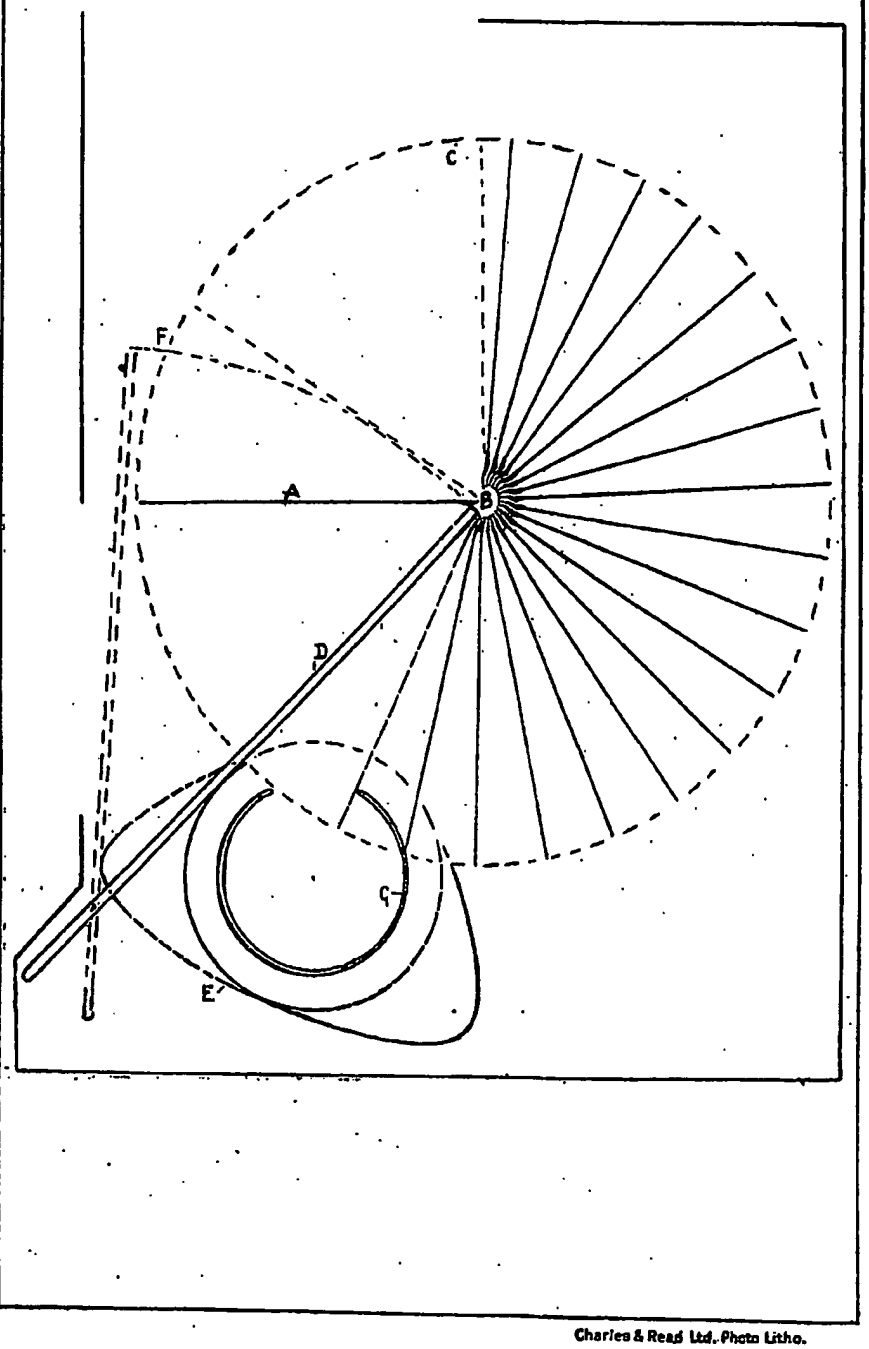
(4). In a device for displaying advertisements or the like comprising a structure wherein are employed a multiplicity of screens in combination with a certain display medium or mediums, arranged, operated and controlled as claimed in claims 1, 2 and 3 but as an alternative the screens are constructed of profusely perforated or equivalent interstitial material, the front of each screen having thereon, painted printed or otherwise impressed certain characters care being taken to conserve the perforations and the back of each screen being equipped with a transparent lining or being otherwise equivalently prepared as a ground on which also are characters, the said ground being opaque but not the characters, or vice-versa, the characters on the front being displayed direct as each screen rises to and temporarily rests in a position prior to intercepting a path of light directed from a source above on to the medium or mediums below and the characters on the back of each screen being displayed in &/or on the mediums by means of projected light and shadow as each screen invades a position directly intercepting such path of light and the medium or mediums below, the improvement consisting in the adaptation of such constructed screens to operate in a manner hereinbefore described and as illustrated to display different compositions in succession.

(5) A device as claim in claims 1. 2. 3. and 4 comprising a combination of screens and one or more display mediums arranged constructed and mechanically adapted to display advertisements or the like in a manner hereinbefore described and as illustrated with reference to the accompanying drawings.

Dated this 22nd day of February, 1932.

JOSEPH FOSTER.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1932.



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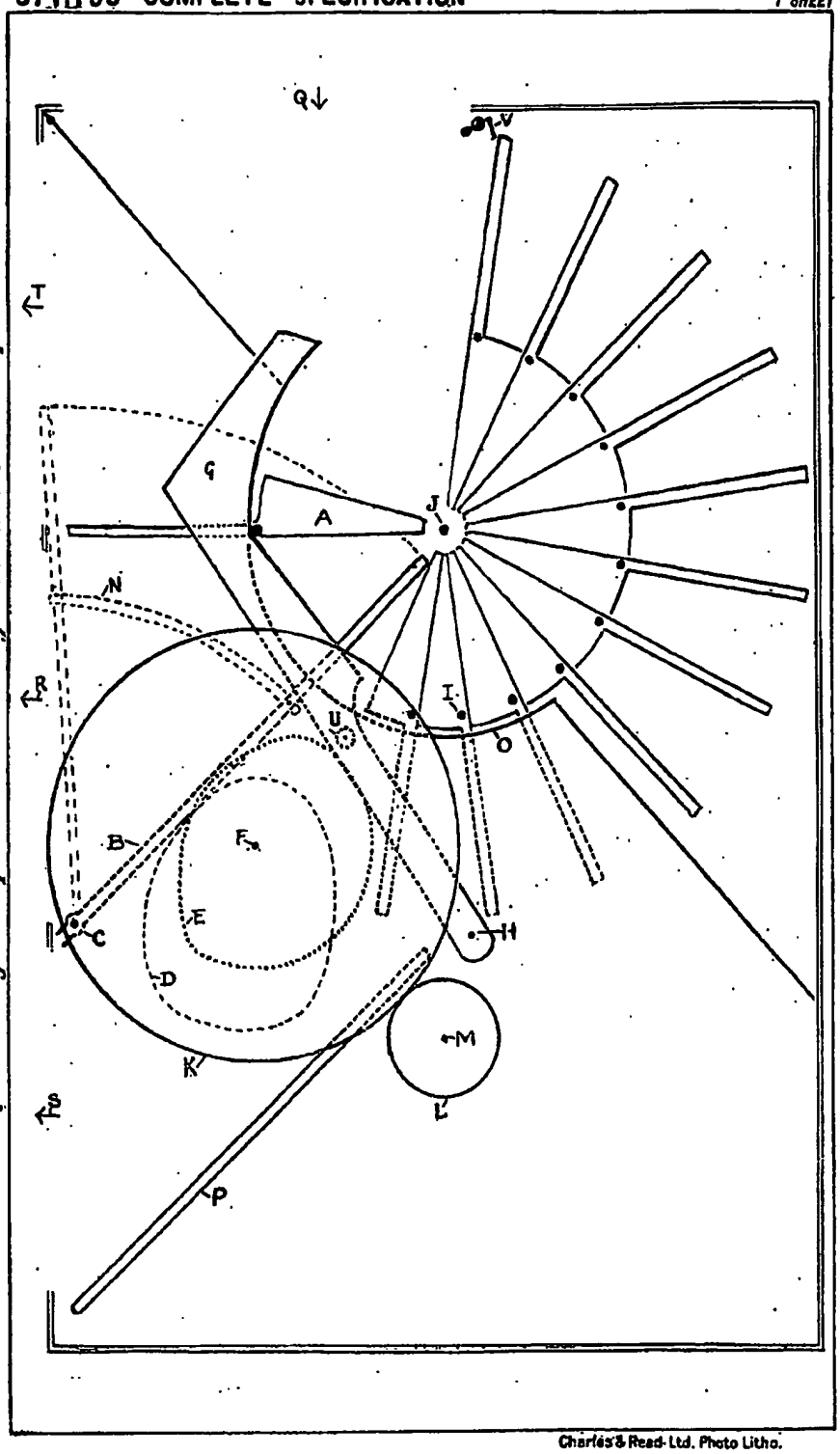

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